



# **VOLUNTARY LANDSCAPING GUIDELINES FOR LOS ALTOS HILLS**

Developed by the Purissima Hills Water District

In cooperation with the Town of Los Altos Hills and the  
California Water Service Company

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# PURISSIMA HILLS WATER DISTRICT LANDSCAPING GUIDELINES

## **INTRODUCTION**

Our only supply of water is from the Hetch Hetchy water system, owned and operated by the San Francisco Public Utilities Commission (SFPUC). Unfortunately, the supply is limited. The Purissima Hills Water District (PHWD) is currently over its annual water allocation—in excess of 130%.

When (not if) the SFPUC declares a water emergency, it is likely that our supply will be reduced up to 50%. If we are not prepared for this certainty, many of our customers will find that their beautiful and costly landscaping will be lost. No one wants this to occur. Therefore, the District has instituted several plans to encourage water conservation:

- PHWD has adopted an accelerated cost pricing curve that uses a five tier cost and usage threshold basis. As each threshold is attained, the cost per unit of water is substantially increased. Users in successive tiers will pay more for each unit of water.
- We are instituting a feedback system to users: The monthly billing statement compares the customer's actual usage with the average user. Those with above-average usage can expect to be charged a much higher cost per unit than those using less.
- Leaks within customers' pipes are a major source of loss; accordingly, we have instituted an automated meter reading reporting detection system in many locations to detect leaks and to minimize lost water.
- In our distribution system, we have added major sensing and reporting mechanisms to monitor and track water delivered to our customers. These systems highlight service problems and allow us to correct problems quickly, minimizing losses.
- PHWD encourages use of water efficient landscape designs. Landscaping is the most significant water usage within the District.

**It is up to all of us to help reduce the impact on our limited water supply. These guidelines describe steps that our customers can take that will help us preserve our treasured water supply.**

## **PURPOSE**

The purpose of these Guidelines is to:

- Promote water-efficient landscaping
- Mitigate future drought impacts
- Support the State of California's water conservation requirements (AB 325)

Today, landscaping accounts for more than 75% of our usage. In periods of drought, excess water usage will certainly result in onerous cost penalties and water rationing resulting in landscaping losses.

Conservation, including water efficient landscaping, insulates against water shortages, stretches the existing water supply and lowers monthly bills. Conservation measures demonstrate that our District is trying to do its part to reduce water waste and places us in a much better position to negotiate additional supplies.

To promote conservation, the District has established the following guidelines that deal with landscaping designs and usage.

## LANDSCAPING GUIDELINES

### A. RECOMMENDATIONS FOR IMPROVED WATER EFFICIENCY

#### Soil Conditioning and Mulching

Use soil conditioning and mulching to increase irrigation efficiency. Incorporate a minimum of four cubic yards of nitrified soil conditioner per 1,000 square feet into the top six inches of soil. Add a minimum of two inches of mulch in non-turf areas to the soil surface after planting. Nonporous material shall not be placed under the mulch.

#### Plant in the Fall

All new landscape installation should begin in the fall. The rains will help establish new roots without relying heavily on irrigation. Plant installation during the cooler months allows plants to acclimate with the least amount of stress.

#### Reduce the Size of Your Turf

Turf is the highest water user in the plant community. It is a shallow rooted matting plant that doesn't hold water well. Pick shady areas and not full sun areas for turf. Consider lawn alternatives like permeable hardscapes, groundcovers, ornamental grasses, or gardens.

#### Drought Tolerant Plants are Encouraged

Planting plants that are drought tolerant will require less water and withstand drought conditions. Avoid invasive plantings.

#### Landscape with Hydrozones

Be sure that planting areas contain plants that require similar water, soil, and sun conditions. Plants with similar water needs should be on the same irrigation zone. Plants with different water requirements should not be on the same irrigation zone.

#### Controllers

Use controllers that feature multiple start times to avoid run off on slopes or clay soils.

#### Irrigation Systems

- Use irrigation systems incorporating drip, bubbler, or comparable technology on slopes exceeding 10% percent within ten feet of hardscape.
- Use separate valves and circuits based on water use.
- Use drip or bubbler irrigation systems for those trees that are irrigated.
- Bubblers should not exceed 1.5 gallons per minute per device.
- Pop-up sprinklers in lawn areas should have at least a four-inch pop-up height.
- Use check valves where elevation differences may cause low-head drainage.
- Design the system for head to head coverage, if appropriate, and minimum run-off and over-spray onto non-irrigated areas.
- Use automatic irrigation systems.
- Equip all irrigation systems with rain shut-off devices.
- The irrigation system installer should provide setting instructions to the owner for the specific set of landscaping plans.

#### Hire Knowledgeable Designers, Contractors and Maintenance Crews

Be sure that the people that you hire are aware of the guidelines and that they are able to comply. Many maintenance crews schedule irrigation times longer than should be. Be sure you hire responsible people who are aware and can react to the changing needs of a landscape.

#### Assistance with Guidelines - Review and Comments

PHWD provides a free service that will evaluate your landscape planning. Our evaluation is non-binding, but will provide the customer with an assessment of the landscaping and irrigation plans and, in cases of excessive water usage, will also offer suggestions as to how to implement a more water friendly design.

### Water Budget

Prepare a water budget for your landscape plans that includes:

- Estimated seasonal monthly water use (in gallons).
- Total irrigated area and total turf area (in square feet).
- A monthly irrigation schedule for the plant establishment period and for the following year. This irrigation schedule should include the following information for each valve:
  - Plant type
  - Precipitation rate
  - Flow rate in gallons per minute
  - Run times in minutes per day
  - Number of watering days per week

Customers who supply landscape and irrigation plans for PHWD evaluation should include proposed plantings and estimated periodic water usage for all new residences and/or proposed landscape modifications. PHWD will, when possible, estimate the range of the user's predicted water costs using the water usage figures supplied. PHWD may include comments that can promote added water conservation by using different irrigation methods and/or plantings.

### General Definitions

Landscape area is that portion of a property using plants, such as trees, shrubs, and ground covers, and all agricultural and ornamental uses of water, including pools, ponds, and fountains. Hardscape is not included in the calculations.

## **B. REFERENCE SOURCES**

PHWD website: [www.purissimawater.org](http://www.purissimawater.org)

PHWD Water Conservation Specialist: Alexis Shields [ashields@purissimawater.org](mailto:ashields@purissimawater.org)

Information on rebates and conservation offers:

Santa Clara Valley Water District

5750 Almaden Expressway, San Jose, CA 95118-3686 (408/265-2600)

<http://www.valleywater.org/>

East Bay Municipal Utility District (EBMUD) publications:

***Plants and Landscapes for Summer-Dry Climates***

EBMUD Water Conservation Office

375 Eleventh Street, Oakland CA 94607 (510/287-0590)

[http://www.ebmud.com/conserving\\_recycling/plant\\_book/default.htm](http://www.ebmud.com/conserving_recycling/plant_book/default.htm)

[H2OUSE – Water Saver](#) – Virtual water conservation options in the home. Garden guides, water budget calculator. Top five steps to conserve water. Additional resources.

[Demonstration gardens](#) – A list of demonstration gardens provided by the Santa Clara Valley Water District

California's Department of Water Resources – Up-to-date information on California's water

<http://www.water.ca.gov/>

California Native plant Society

<http://www.cnps.org/>

Bay Friendly Landscapes

<http://www.stopwaste.org/home/index.asp?page=188>

Environmental Design and Protection Committee Landscape Manual – Town of Los Altos Hills